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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,429	07/16/2002	Peter Carlo Rem	6900-14	9130
7590	03/30/2004		EXAMINER	
J Rodman Steele Jr Akerman Senterfitt & Eidson Post Office Box 3188 West Palm Beach, FL 33402-3188			RODRIGUEZ, JOSEPH C	
		ART UNIT	PAPER NUMBER	
		3653		

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/088,429	REM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Joseph C Rodriguez	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on \_\_\_\_\_.
- 2a)  This action is **FINAL**.                            2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 14-20 is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-13 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on 16 July 2002 is/are: a)  accepted or b)  objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some \*
  - c)  None of:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.
- 4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5)  Notice of Informal Patent Application (PTO-152)
- 6)  Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Election/Restrictions***

Applicant's election with traverse of claims 1-13 in Paper No. 11 is acknowledged. The traversal is on the grounds that all claims rely on the "same technical feature and differ only with respect to its detailed engineering". This is not found persuasive as all claims must share a "special technical feature", as defined under PCT Rule 13.2, and Applicant's claim format and subsequent arguments implicitly teach that no special technical feature exists for all of the claim groupings.

The requirement is still deemed proper and is therefore made FINAL.

Claims 14-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected claim grouping, there being no allowable generic or linking claim.

### ***Specification***

The disclosure is objected to as lacking appropriate section headings as outlined in 37 CFR 1.77. See also 37 CFR 1.72-1.77; MPEP § 608.01(a). Correction is required.

The abstract of the disclosure is objected to for improper language. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The

abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. *It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.*

### ***Claim Objections***

The claims are objected to as the form of claims 1 and 12 is improper. Where a claim sets forth a plurality of elements or steps, as in the instant claims, each element or step should be separated by a line indentation. See MPEP 608.01(m) and 37 CFR 1.75(i).

Claims 1-13 are objected to because of the following informalities:

Claim 1 should read "A method" and the claims depending therefrom should read "The method".

Claims 12 should read "An apparatus" and the claims depending therefrom should read "The apparatus".

Claim 12, second line from bottom, should read "and the supply opening".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 13, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12-13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Heyman (Fig. 3, particle restraining element 7).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heyman in view of Siebert (DE '726) and Saitoh et al. ("Saitoh") (US '533).

Heyman (Fig. 3; col. 2, ln. 56 et seq.) teaches all that is claimed except for expressly teaching the separation of particles, such as plastic and polyolefines, having a density lighter than the fluid medium, wherein said fluid medium is a specific temperature. Siebert, however, expressly teaches the sorting of plastic and polyolefines that applies specific temperatures to the plastics to enhance density differences between the plastics, thus allowing an easier separation (Abstract). Moreover, this type of sorting is more economically beneficial than the prior art sorting (Id.). Saitoh also teaches that plastics can be separated more efficiently by using a denser fluid medium and a specific temperature range to assist with the stratification (col. 2, ln. 38 et seq.). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Heyman to separate plastics of varying densities using different temperatures to achieve cost savings.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heyman in view of Siebert (DE '726) and Saitoh et al. ("Saitoh") (US '533) as applied to claims 1-6 and 9-11 above, and further in view of Yang et al. ("Yang") (US '910).

Heyman in view of Siebert and Saitoh as set forth above teach all that is claimed except for expressly teaching using discharge-facilitating particles having a specific density. Saitoh, however, already teaches the use of various discharge facilitating agents that increase the separation efficiency (col. 2, ln. 38 et seq.). Yang also teaches the use of discharge-facilitating particles having the claimed specific density that also enhance the particle separation efficiency (col. 3, ln. 2 et seq.). Therefore, it would

have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Heyman as taught above to increase the separation efficiency.

**Conclusion**

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph C Rodriguez whose telephone number is 703-308-8342. The examiner can normally be reached on M-F during normal business hours (9 am – 6 pm, EST).

The **Official** fax phone number for the organization where this application or proceeding is assigned is 703-872-9326 (After-Final 703-972-9327).

The **UnOfficial** fax phone number for the organization where this application or proceeding is assigned is 703-306-2571 or 703-308-6552.

The examiner's **UNOFFICIAL Personal fax number** is 703-746-3678.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Receptionist** whose telephone number is 703-308-1113.

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March 24, 2004

  
DONALD P. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600